

WHAT IS CLAIMED IS:

1. A computer system comprising at least one upper node device each having at least one connection port, an information exchanger connected to the connection port for controlling packet transfer, and a storage controller connected to the information exchanger for passing a packet via the information exchanger with the upper node device, wherein

the storage controller has a control table containing identification information of the connection port and security information of the connection port so as to detect replacement of the connection port according to information obtained from the information exchanger and replace the identification information of the connection port before replacement in the control table with identification information of the connection port after the replacement.

2. The computer system as claimed in Claim 1, wherein upon detection of disconnection of a first connection port from the information exchanger and connection of a second connection port to the information exchanger, the storage controller detects that the first connection port is replaced by the second connection port.

3. The computer system as claimed in Claim 1, wherein the control table is provided for each of the upper node devices.

4. The computer system as claimed in Claim 1,

wherein the control table further contains identification information of the upper node device.

5. A computer system comprising at least one upper node device each having at least one fiber channel port, a fabric connected to the fiber channel port for controlling packet transfer, and a storage controller for passing a packet via the fabric with the upper node device, wherein

the storage controller has a control table containing a node name of the upper node device, a port name of the fiber channel port, and an access enabled/disabled state of the fiber channel port, so that replacement of the fiber channel port is detected according to information obtained from the fabric and the port name of the fiber channel port in the control table is replaced by a port name of a new fiber channel port replacing the fiber channel port before the replacement.

6. The computer system as claimed in Claim 5, wherein the storage device detects the node name of the upper node device where the fiber channel port connection state has been changed, detects a port name of the fiber channel port to be connected to the upper node device having the node name, and compares the detected port name with the port name contained in the control table, and if the control table contains a first port name not detected and does not contain a second port name detected, it is detected that the fiber channel

port of the first port name is replaced by the fiber channel port of the second port name.

7. The computer system as claimed in Claim 5, wherein the control table is provided for each of the upper node devices.

8. The computer system as claimed in Claim 5, wherein the control table further contains a node name of the upper node device.

9. The computer system as claimed in Claim 5, wherein when a port name of a fiber channel port allowing access is entered, the storage controller detects a node name of the upper node device to which the fiber channel port allowing access is to be connected, detects a port name of the fiber channel port to be connected to the upper node device of the node name, and creates the control table having the node name, the port name, and access enabled/disabled information input.

10. The computer system as claimed in Claim 1, wherein interface between the upper node device and the storage controller is a fiber channel standardized by ANSI X3T11.

11. The computer system as claimed in Claim 5, wherein interface between the upper node device and the storage controller is a fiber channel standardized by ANSI X3T11.

12. The computer system as claimed in Claim 3, wherein the storage controller is connected to a

storage device having a plurality of storage domains and the access enabled/disabled state is managed for each of the storage domains and for each of the fiber channel ports.

13. A storage controller which is connected to an information exchanger connected to a connection port included in an upper node device and which passes a packet via the information exchanger with the upper node device, wherein

the storage controller has a control table containing identification information of the connection port and security information of the connection port, detects replacement of the connection port according to information obtained from the information exchanger, and replaces the identification information of the connection port in the control port by identification information of a connection port after the replacement.

14. A storage controller as claimed in Claim 13, wherein when connection between a first connection port and the information exchanger is released and connection between a second connection port and the information exchanger is confirmed, the storage controller detects that the first connection port is replaced by the second connection port.

15. The storage controller as claimed in Claim 13, wherein the control port is provided for each of the upper node devices.

16. The storage controller as claimed in Claim

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13, wherein the control table further contains identification information of the upper node devices.

17. A storage controller connected to fabric connected to a fiber channel port contained in an upper node device and passing a packet via the fabric with the upper node device, wherein

the storage controller has a control table containing a node name of the upper node device, a port name of the fiber channel port, and a fiber channel port access enabled/disabled state, detects replacement of the fiber channel port according to information obtained from the fabric and replaces the port name of the fiber channel port in the control table by a port name of a fiber channel port after the replacement.

18. The storage controller as claimed in Claim 17, wherein the storage controller detects a node name of the upper node device whose connection state to the fiber channel port is changed, detects a port name of a fiber channel port to be connected to the upper node device of that node name, compares the detected port name with the port name contained in the control table, and if a first port name is not detected but stored and a second port name is detected but not stored, then detects that the fiber channel port of the first port name is replaced by the fiber channel port of the second port name.

19. The storage controller as claimed in Claim 17, wherein the control table is provided for each of

the upper node devices.

20. The storage controller as claimed in Claim 17, where the control table further contains a node name of the upper node device.

21. The storage controller as claimed in Claim 17, wherein when a port name of a fiber channel port allowing access is entered, a node name of the upper node device to which the fiber channel port allowing access is to be connected is detected, a port name of the fiber channel port to be connected to the upper node device of that node name is detected, and the control table is created containing the node name, the port name, and the entered access enabled/disabled information.

22. The storage controller as claimed in claim 13, wherein interface between the upper node device and the storage controller is a fiber channel standardized by ANSI X3T11.

23. The storage controller as claimed in claim 17, wherein interface between the upper node device and the storage controller is a fiber channel standardized by ANSI X3T11.

24. The storage controller as claimed in Claim 17, wherein the a storage device having a plurality of storage domains is connected to the storage controller and the access enabled/disabled management is performed for each of the storage domains and each of the fiber channel ports.